



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Gang Paul Chen et al
Serial No.: 09/898,469
Filed: 07/05/2001
Title: INTERLEAVER FILTERS EMPLOYING NON-BIREFRINGENT ELEMENTS

Examiner: Juba Jr., John
Group Art Unit: 2872
Docket No.: PD 012

RESPONSE TO OFFICE ACTION
DATED NOVEMBER 5, 2002

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Please amend the above identified application as follows:

In the Specification:

Please rewrite paragraphs [044] and [0080] as follows:

-- [0044] As seen in the perspective of Fig. 4 and schematic of Fig. 5, the second waveplate combination 40 each different waveplate 42-45 is mounted in a flat or planar short central body 49 that fits into the associated transverse groove 48 holder on the optical bench 12. Side wings 51, 52 enable easy rotational manipulation of the waveplate angle. The active optical element, e.g. the $\frac{1}{4}$ or $\frac{3}{4}$ waveplate 42, is set into a central aperture 54 in the body 49. In this instance the first $\frac{3}{4}$ waveplate, as seen in Fig. 5, converts the linear polarizations of the input beams to circularly polarized beams of opposite senses so that the right beams have positive directions of circulation and the left beams have negative directions of circulation (Fig. 3). The states of polarization of the upper and lower beam pairs are then selectively and separately transformed by the $\frac{1}{2}$ waveplates 43, 44 which respectively span the upper beams only and the lower beams only. Separate transformation is necessary because the practical limitations on parallelism dictate that the upper and lower beams be separately phase tuned. The open parts of the apertures 54